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Friday's Feature

By

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Brown patch disease can be common in the fall

After a busy season of fighting weeds and other problems in the lawn, the next disorder to look for will be a common fungal disease called brown patch. It is caused by the fungus *Rhizoctonia solani*, and affects all warm-season turfgrasses, especially St. Augustinegrass and zoysiagrass.

Brown patch usually appears as somewhat circular brown areas in the lawn. These patches usually start as six to twelve inch diameter circles that turn yellow and then reddish-brown, brown, or straw-colored as the leaves start to die. Patches will frequently merge and may expand to several feet in diameter, forming irregular dead areas.

The fungus is most active along the border of the patch where it is expanding into the healthy surrounding area. Often, there may be rings of yellow/brown grass with green grass in the center giving it a "doughnut" or "smoke ring" pattern. In shady, moist areas a circular pattern may not occur.

To distinguish this fungal disease from other disorders, check the base of an off-colored leaf blade at the margin of a patch. If the blade easily comes loose from the plant and the leaf base is tan to brown in color and is rotted in appearance, then you may have brown patch disease.

Brown patch disease is most likely to be observed from November through May. This disease becomes most active when daytime temperatures range between 75 and 85 degrees F with night time temperatures below 68 degrees F.

Infection can be triggered by rainfall, excessive irrigation or extended periods of high humidity resulting in the leaf canopy being continuously wet for 48 hours or more.

Excessive high nitrogen fertilization can increase the severity of this disease, especially if applied too late in the season. A weak, less vigorous lawn is more susceptible to disease. Lawns that have suffered insect damage, thatch accumulation or improper irrigation practices are at higher risk of being infected with brown patch disease.

When environmental conditions are favorable, brown patch is likely to develop on susceptible turfgrasses. The severity of the disease can be somewhat controlled by following good lawn management practices. Avoid heavy applications of nitrogen fertilizer during the potential disease development periods—spring and fall. Irrigate only when necessary and do so only in the early morning hours (between 2 am and 8 am) when dew is already present. And, since mowers can spread this disease, mow diseased areas last, and wash the turf clippings off the mower before proceeding to the next site.

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A number of fungicides are recommended for brown patch control including those that contain azoxystrobin, myclobutanil (Immunox), propiconazole, thiophanate methyl, triadimefon (Bayleton) and trifloxystrobin. Always remember to read and follow the label recommendations.

Since this disease normally occurs when the turfgrass is not growing very rapidly, recovery may be very slow. The fungicides simply stop the disease from spreading; they do not promote turfgrass growth. This is why it may be beneficial to apply these fungicides prior to disease development, but only if this disease has been a routine problem in the landscape.

Theresa Friday is the Residential Horticulture Extension Agent for Santa Rosa County. The use of trade names in this article is solely for the purpose of providing specific information. It is not a guarantee, warranty, or endorsement of the product name(s) and does not signify that they are approved to the exclusion of others.